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Heterogeneity of Cellular Senescence and its Implications for the Development of Markers

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Propositions
belonging to the thesis

Heterogeneity of Cellular Senescence and its Implications for the Development of Markers

1. The senescence phenotype is heterogeneous, particularly the transcriptome –This thesis.
2. The cell type of origin determines the senescence phenotype of cells –This thesis.
3. Different senescence-associated programs exist that each use specific molecular effectors to achieve the same end goal –This thesis.
4. Researchers should use multiple senescence markers to measure senescence. A single marker is never universal and specific –This thesis.
5. Intra-population heterogeneity of cells should be taken into account when searching for new markers of cellular senescence –This thesis.
6. Heterogeneity of senescence can be exploited for the development of therapeutic approaches aimed at specifically targeting detrimental senescent cells–This thesis.
7. Perfection is the enemy of progress – Winston Churchill.
8. If the problem can be solved why worry? If the problem cannot be solved worrying will do you no good – Shantideva.

Alejandra Hernández Segura
Groningen, May 2019